

Editorials

by the *Laiety*

Why the Universe Will Never Die.

By J. O. Henkel.



IN a forest we find co-existing evidences of life in all its stages from its earliest development to the last signs of death and decay. There are the nuts and seeds, the germs of future plants, then the young and tender saplings, next the full grown adults. Here and there we come across the "giants of the forest," vast trees with rings denoting hundreds of years' growth. Later in the stages of life we find the old moss grown oaks, etc., that the next storm will bring to the ground, and, last of all, the decayed and fallen remains of former life.

The same thing is true of the starry heavens. Here we find worlds in every stage of growth, development, and decay.

There are the nebulae worlds just coming into being, the white suns, of which Vegas is a good example, in intensely hot youth; next, worlds like our own sun, in a somewhat later stage of growth, but still hot and luminous; next we have worlds growing older and darker, such

as many of the red stars appear to be doing; and, lastly, dead worlds like our own moon.

Some points in this classification may be open to question, for it is not by any means certain that red stars, for instance, are cooling down always; they may sometimes be growing hotter, at least for a time, and nebulae do not always develop into stars, but the above is the generally received order.

On philosophic grounds Herbert Spencer was convinced that there must be cycles of growth and decay in the evolution of the universe. Moreover, it may be asked, how is it that the universe is not dead already? If it has existed from eternity there has been an infinite time for this dissipation to take place. On the other hand, we may say that nothing whatever can be postulated as to an infinite universe at all, except that it be infinite, the dissipation of its energy must take an infinite time, and so the death of the universe will never come at all.

Though it is true that the suns of the universe are growing older by radiation, this radiant energy is absorbed and preserved by the dark stars and the nebulae at low temperature. Of recent years it has been shown that the quantity of dark and faintly luminous matter in the part of the universe which alone we can reach with our tele-

scopes is far greater than was formerly supposed to be the case. Photographs of regions of the sky taken after long exposures have revealed the existence of nebulous matter utterly unknown before. The well known group of the Pleiades "is wrapped and entangled in an immense comical cloud."

Some of the nebulae revealed by the photographic camera have never yet been seen by human eye through the telescope. The phenomena of variable stars, such as Algol, are best explained by the existence of dark companions, sometimes larger than their accompanying luminary, whose light they wholly or partly eclipse. There are other grounds, too, for the assuming of countless dark bodies through space.

The sun and other luminous stars radiate heat and light into space, this radiant energy is not lost but is constantly absorbed by the colder portions of the nebulae and dark bodies of the universe. Every ray emitted by a sun is absorbed and its energy transferred through the gaseous particles of the nebulae to suns that are being formed in the neighborhood of or within the nebulae. Now and again collisions of dark bodies must occur, resulting in the evolution of immense heat and light and the phenomena of a "new star" is seen.

Two colliding suns give birth to an enormous mass of gaseous matter under the influence of gravity and radiation pressure of light and the process of evolution once more goes on "in an eternal cycle in which there is neither beginning nor end." Such, at least, is the opinion of Arrhenius, upon whom the University of Cambridge has just conferred its honorary degree, and there is much to be said for this view of the matter.

Under the influence of gravitation matter tends to concentration in vast centers, but this is counteracted by the scattering action of the light pressure. This idea of the balancing of contrary tendencies is ancient, and we well remember being told of the two "forces, attraction and repulsion, by which the world is kept going." The philosophic notion is at least as old as Aristotle. "Solar systems are evolved from nebulae; nebulae in their turn are produced by the collision of suns."



Industrial Graining Boy's Birthright.

By G. Edward Fuller.



THE New Year's utterances of a half-dozen or more college presidents on the subject of business training for college men, together with the report of the New Jersey commission on industrial education, and the proposed Davis bill before congress, are encouraging signs—but will Chicago act?

There is no necessity for waiting until a new generation of special theory teachers shall be trained to do this work, since the practical kind of teachers really needed are here now, and will be found among our business men and in the factories, ready to serve.

In Chicago's live way of doing things, a beginning at the bottom in the primary grades of our public schools can be made at once, this spring of 1909, without interference with any established curriculum.

It is one of the possibilities of the times to introduce industrial

instruction in an effective, entertaining, and inexpensive manner during the common school course.

"As the twig is bent so will the tree incline," and too many of our boys go wrong because they get a vague, wobbly sort of start during school life, with no definite line laid down for them to bow to, whereas all should be afforded an early chance to acquire an inclination for industrial affairs—this industrial age owes that much to them.

When you ask a policeman in any part of the city about some recent local petty crime his usual reply is, "O, young fellows out of work!"

What our industrial development and our social evolution both require is more of the spirit of occupation for occupation's sake, and that is a sentiment which can be cultivated by object lessons and well timed elucidations directed toward the productive and dependable, but in harmony with the regular school courses.

A system similar to the traveling library methods could be organized quickly, and practical working demonstrators secured from the business houses and from factories, while systematic office inspection and factory visiting could be made a part of the whole in such a way as to make the boy fall in love with the scheme; which also can be carried through every grade, and even into the colleges and universities, as well as joined to the consular and diplomatic preparatory studies.

Museum, exposition, and commercial demonstration lines of work have shown the value of object lessons and applied methods in educating public taste, but they all lack the continuity essential to complete educational science in these matters.

A practical working collection of scientific specimens, commercial samples, classified with catalogues of apparatus and operative machinery, together with current statistics, including market reports and quotations, would give basic facts for students in industrialism.

Temporary locations could be secured here and there for exhibits and talks, one class of commodities after another shown and leaflets or bulletins distributed—even instruction by correspondence could be carried on.

A beginning like this may be made with a line of commercial

products of the greatest current interest, and a spirit of rivalry engendered between different classes of manufacturers that would create a wholesome excitement for the pupils.

Along with the detailed and specific knowledge of the natural history and manufacturing possibilities of the goods, there would come that elementary curiosity which is the foundation of vocational pride.

Look back to 1871 and judge what the generation now entering school will have to face before their children come into their own—it's serious thinking. We can't make farmers of city boys, the professions and the offices are over full, but any manufacturer will tell the inquiring educator that trained young men with working ideas are wanted and welcome in the factories.



Individual Supplants Family Group.

By Ada May Krecker.



ADAMIAN JAMES heroine observed that a great many of her personal friends were not known to her mother. She was a representative of the times. For our contemporaries do not make friends by families, nor go out by families, nor think by families, nor even eat and sleep by families. It takes an older fashioned civilization for that. They do it in Germany to a degree. And in India they do it to a greater degree, with patriarchal households of several generations.

There are no individuals in such case, only groups. The family acts as a unit under the father's guiding hand. But the newer idea is for the members of the family group to declare themselves as individuals. They vindicate individuality in the heart of our current collectivism. For, true enough, while there is much making for sociality in our modern notions and institutions and customs, beneath all is the rise of the individual.

Our democracy is making individuals. The rise of the masses is the birth of men. And the rise of the women is the creation of women. All our movements for collective progress fundamentally are measures for the cultivation of the individual. All our swarming clubs, societies, and givers organizations are freeing the individual. They are giving him his liberty from the ancient group activity and providing him with a channel for expressing his uniqueness. They furnish different churches for the same family, different clubs for different ages, different social sets for twin sisters.

Mothers of a generation ago lived in and for their families, none of whom, perhaps, had similar tastes to their own. Now they choose their own mates in clubs and classes of congenial temper. And when husbands prove misfits they get themselves others. The children follow in their wake. Sisters no longer necessarily are chums by simple virtue of the family relation. The blood tie is insufficient when there are no bonds of the higher life. Each drifts into her own sympathetic circle, which is formed quite irrelevantly to the family communities. The youngest are separating from the family collectivity. Witness our public nurseries.

Mrs. Gilman has written a good deal about the issue. She is for bringing up children with children, a distinguishing modern idea. The little ones are to be dissociated from furniture built for grownups, from conversation pertaining to mature experiences, from adult thought and food and atmosphere, and put into illipitian paradises populated exclusively by their own kind, constructed for their comfort and entertainment and instruction. Here, among their own kind, they are healthily remote from the indulgences of doting grandparents, the inexperience of mothers, the recklessness of senior sisters and brothers. They are surrounded by those of their own language, mentality, tastes, amusements, capacities.

There is only a step from Mrs. Gilman to Plato, who arranged for the children to be wards of the state instead of the property of their individual parents. With such a scheme the last need for the family unit would disappear, and with the passing of the need would go the institution itself. The family group would follow the departed clan and tribe and vanishing nation.

We are continuing to live in groups. But we are rearranging the groups. The ties of flesh and blood cease to hold. Only when the

racial life is centered in materialities could the blood bond suffice. As it passes to the higher planes congenialities of temperament and occupation are more binding. Instead of living in families, and clans, and tribes, and nations we gather into cosmopolitan cities, each member of the family perhaps in a different town, according to the personal predilections for occupation, amusement, climate, and other individual idiosyncrasies.

The rigid family institution holds too often ungenial natures into close relationship with no reason save the most material and economic considerations. Therefore, it is bound to pass. It is a unit formed of bonds that cease to hold. Surviving so long as it proves useful, the family will be displaced by more loosely constructed groups of persons drawn together by super-physical ties.



"Easy Going" Trait Often Cowardice.

By John A. Howland.



THERE is a type of man, old and young, who temperamentally is of the "easy going" disposition. He may show the characteristic through laziness, mentally and physically, or because of an inherent good nature. He may yawn to himself and ask, "O, what's the use?" or he may, out of his sunny disposition and dislike of trouble, shun responsibilities and blame that are not his and try to preserve his innate good nature in the face of his unjust loads of blame.

But how much of this "easy going disposition" in either type of man is a virtue? How much of it, in reality, represents a form of cowardice? How much of it in the aggregate of life and living is a bad, flagrant vice?

In the boy at school who is disposed to run with complaints and tale telling to his teacher, this "snitching" calls for the loudest condemnation of his fellows. Whether his complaint be just or unjust, the practice is vicious in the schoolboy's ethics. But in the evolution of these ethics, what was the basis for them? Simply in the retaliatory, "You tell on me and I'll tell on you!" And, further along in the evolution, the threatening, "You tell on us and we'll all punch your face."

Tattling to the detriment of another person is indefensible. But for one to withhold the truth which clamors for the telling, even if

that truth be in protection of the one who tells it? Is it justifiable? "What have I done? What have I left undone?"

Here are two introspective questions which, if answered honestly and without favor to himself, must be the gauge of all that the worker is accomplishing for himself and for society at large. These questions, answered truthfully to himself, must measure the young man's chances for a successful life.

In answering these questions to himself that young man must discover that in exerting his best efforts always, his work cannot be always up to his ideal mark. He must realize that now and then things are left undone which in the light of after consideration should have been done. For these shortcomings and failures he must censure himself—he may expect censure from others because of them and honestly shoulder the results.

Squaring himself in this manner, discounting his own human frailties and indecisions and misjudgments in advance, can he afford to shoulder in silence those other shortcomings of his fellows, some of which must be deliberately put upon him because of the knowledge that he will not "snitch"? Either with himself or with regard to the opinions of his fellows, he has his individual ledger account to balance. Can he keep his accounts balanced if on the one side accomplishment of the best that is in him rates only 100 cents on the dollar, while in the other side the shortcomings that are his, or that are assumed as his, alike are liabilities of unknown weight and quantity?

No honesty can exist for long that denies honesty to itself. Before a man is in position to be honest toward the world he must prepare

to be honest with himself. Meeting honesty in others, honest treatment will be accorded by them, but meeting dishonesty, he may expect to be made the tool of its followers to the extent that they are designing and subtle in the imposition.

Occasionally, in the weakling individual, handicapped in his disabilities, his shiftings of responsibilities to the stronger man appeals to the sympathies of his fellows. Assuming these shortcomings of the man less capable for world's work in this way is charity. It may be misplaced charity in a general sense, but sympathy can justify it. Truth told which inevitably must cause the downfall of the weakling, but which only may blur the record of the stronger man, becomes a charity which reacts in strength to the one who assumes the burden of silence. The world may be better for the sacrifice.

But the silence of lethargy or misplaced sentiment in the man or mere "easy going disposition" at the best can stay only for awhile the inevitable end of those dishonest ones who would shift the burden of responsibility upon him. In the meantime that ledger account of the faithful, honest worker may be out of balance beyond the power of readjustment.

In my observations the only true course for the man of honest work and purpose is to keep clear tracks behind him. Walking in the open, he can have no cause for devious, tangled footprints marking his progress. There is no selfish reason within him prompting him to threaten against "snitching." Why should he enter into the offensive and defensive alliance out of which these false ethics, discounting truth, have sprung? To do so is to compromise with all

that wars upon the right. As a man may be better for concession to the weakling, calling for his sympathy, so he is the worse for compounding with the dishonest one who would shoulder shortcomings anywhere that they might be unloaded safely to himself.

That individual, or that opinion to which the shirking one would put up the false front of virtue at the expense of another, must be an individual or an opinion vested with a certain right of inquiry. "Why did you do this? Why didn't you do this?" These are the questions which the dishonest one would shift to another for answer. To the one who assumes the obligation of an answer, directly or indirectly, the charge of false posturing must apply. And of greater significance is the fact that with this false assumption of false obligations on the part of another, the disposition of the dishonest one is to presume more upon his victim's weakness. The conscientious, easy going one becomes the tool of the designing man.

"That was not Jones' fault," volunteered the honest Smith in the face of inquiry: "the blame of it rests on me."

Shall one wonder that both Smith and Jones are the better for the situation which calls for such a speech?

Or that Jones and Smith mutually would be the worse if out of such a situation Smith had retained a coward silence?



"Avoid the Beginning of Quarrels."

By Helen Oldfield.



ACENTURY ago, in the era of elopements, when, because of her easy marriage laws, persecuted lovers regarded Scotland as the "promised land," an old dominie, who, from his point of vantage just across the border on a much traveled highway, tied many matrimonial knots, used to present the brides of his making with what he called "a card of counsel for conduct in married life," the first item on which was: "Avoid the beginning of quarrels."

No better advice could be given, then or now, to a newly wedded couple. King Solomon, with all his wisdom, never spoke truer word than that "the beginning of strife is like the letting out of water; therefore leave off contention before it is meddled with." Most quarrels, conjugal or otherwise, begin with trifles, and lo! "Behold how great a fire a little matter kindleth!" Avoid disputes. "It is the first step which counts," for which sound reason, do not take it!

An old man, who, as a criminal lawyer of many years' standing, had wide and deep acquaintance with human nature, used to tell his daughters: "Make up your minds to the fact that your husbands are but men, although they are gentlemen, and take heed how you provoke them to anger. It takes two to make a quarrel; never be

one of the two, and remember that your dignity best is preserved by silence when you are provoked. Never forget that you take your husband for better, for worse, and if, which heaven forbid, worse comes, at least bear it like a Christian gentleman. You will find the recipe in Matthew V., beginning at verse 39."

There is no bit of wisdom which prospective brides and grooms more profitably may take to heart than that while quarrels between lovers who are still a-courting may successfully be patched up as good, even better than new, provided always that neither of the lovers meant malice, and also that both are affectionate and forgiving of disposition, the genuine matrimonial family row rarely is followed by kisses, until there has been heart burning which sears, and acrid bitterness of spirit which long endures under the sweet of reconciliation. A tempest of tears and temper not often is the forerunner of clear-shining after rain. On the contrary, it by far is more likely to stir up lasting dissension and anger.

It is a well established fact in physiology that a severe wound, however thoroughly it may be healed, scarcely, if ever, fails to leave the adjacent nerves in a state of intense sensitiveness for life, unless the opposite result takes place and they suffer permanent paralysis. Something of a like nature frequently happens in the case of a serious quarrel between two people who should be all in all to each other, each in honor preferring the other.

It is better that the newly wedded pair should be laughed at by

their friends, because, as the saying is, they "fall over themselves" in their great anxiety to please, rather than begin a disagreement which it is more than possible may prove to be:

"The little rift within the lute,

Which by and by shall make its music mute,

And ever widening, slowly silence all."

When a man or a woman is deeply in love he or she undoubtedly will make all manner of concessions, all kinds of advances, to the end that an ante-nuptial difficulty may be settled, that the painful breach may be healed; but after the matrimonial knot is well tied and the suitor is transformed into the legal lord and master of his lady love, the chances are that he undergoes some phases of obstinacy which leave kisses woefully out of the game. A quaint old writer has said that "the kisses which smooth away quarrels between lovers are the baits by which Cupid lures the game, but when he has securely and safely bagged the quarry, the bait becomes unnecessary, and consequently not always is forthcoming."

The late Mrs. Sherwood, in a story written shortly before her death, said: "Of all asinine and brainless creatures on the face of the earth there is none to compare with the woman who quarrels with her husband for the fun of it, and the pleasure of making up. Yet it is done every day, unspeakably silly and childish as it is." Nor is this language too strong. Such folly is akin to that which sets fire to the house over one's head in order to see the blaze.

There is no sweetness in lovers' quarrels which compensates for the sharpness of their sting; one might as well preach the advisability of breaking a bit of rare china in order to mend it with some wonderful cement which shall make it stronger than ever. In this world there are many risks which it is wiser not to incur, and true it is that:

"To be wroth with one we love

Doth work like madness in the brain."

How can it be possible that love of any sort can be made more precious by disputing, and wrangling, by contradiction and continual disagreeing? During the days of courtship it is possible that it may pass for playful teasing; when hearts are soft and heads even softer, but after marriage there is danger that each will be ready to assert his or her rights, and each be less willing to yield to the other.

Lovers' quarrels usually are either ebullitions of jealousy, mostly due to selfishness, or else they come from what somebody has called "the leakage of bad temper," a most undesirable quality for either husband or wife. If lovers cannot avoid quarrels before marriage there is small hope that they will be able to eschew them afterwards.

